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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/843,291 | 04/25/2001 | Keith Joseph Allen | 7780/12 (T00340) | 7814 |

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EXAMINER

KIM, JUNG W

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 09/843,291 | Applicant(s) ALLEN ET AL. | |
| | Examiner Jung W. Kim | Art Unit 2132 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/06.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to the amendment filed on March 16, 2006.
2. Claims 1-29 are pending.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 16, 2006 has been entered.

Information Disclosure Statement

5. The IDS submitted on March 16, 2006 have been considered.

Response to Arguments

6. Applicant's arguments with respect to amended claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

7. Claim 21 is objected to because of the following informalities: in line 3, replace "lien" with --line--.

Claim Rejections - 35 USC § 103

8. Claims 1, 4, 6, 8, 9, 12, 14, 15, 17-19 and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigney et al. RFC 2865 "Remote Authentication Dial In User Service (RADIUS)" (hereinafter Rigney) in view of Xu et al. USPN 6,151,628 (hereinafter Xu) and Sitaraman et al. USPN 6,430,619 (hereinafter Sitaraman)
9. As per claim 1, Rigney discloses a method for providing a port value to a service provider, comprising:
- a. receiving a service request from a subscriber, which includes a subscriber identifier, on a port and transferring the subscriber identifier and the port value to the service provider for authentication of the subscriber (sec. 2, 1st paragraph);
 - b. authenticating a service request based on the port value and subscriber identifier at the service provider, wherein the service request is only authenticated when the subscriber sends the service request through the port to which the user is allowed access (sec. 2, 3rd and 4th paragraph).
10. Rigney does not expressly disclose associating a line identifier with the port assigned to a subscriber wherein the line identifier is usable to authenticate a service

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request. Xu discloses a method for connecting a client to a computer network by associating a line identifier (telephone numbers of the caller and callee) with an IP address and port number associated with the caller wherein the line identifier is stored in a database, retrieved from the database in response to a service request, and the line identifier is transferred to the service provider; wherein the service provider uses the line identifier to authenticate the service request along with a username and password (11:20-12:11, esp. 11:32-40; 15:45-17:24, Phase 1 Authentication Interface and Phase 2 Authentication Interface, esp. 15:49-64 and 16:53-67). Hence, it would be obvious to one of ordinary skill in the art at the time the invention was made for the service request to be authenticated based on a line identifier, since it securely establishes a unique mapping between a subscriber's line and authentication information associated with the subscriber to link a subscriber's request with an IP address and port value as known to one of ordinary skill in the art and as taught by Xu, *ibid*.

11. Finally, Rigney does not disclose the service provider to be a DSL internet service provider, the subscriber to be a subscriber of DSL internet service, wherein the service request is made via a DSL internet connection. Sitaraman discloses prior art access network systems wherein subscribers to an Internet service provider contacts a network access server using a digital subscriber line, wherein the subscriber is authenticated by means of a RADIUS server (col. 1:14-42). Hence, it would be obvious to one of ordinary skill in the art at the time the invention was made for the authentication steps using a RADIUS protocol to be incorporated in a DSL access network system since it enables proven authentication methodologies to be

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incorporated in new network access technologies (Sitaraman, *ibid*). The aforementioned cover the limitations of claim 1.

12. As per claims 4 and 8, the rejection of claim 1 under 35 U.S.C. 103(a) is incorporated herein. (*supra*) In addition, the service request is authenticated by the provider based on the subscriber identifier and the line identifier. (Rigney, sec. 2, 3rd and 4th paragraph; Xu, col. 11:20-12:11, esp. 11:32-40; 15:45-17:24, Phase 1 Authentication Interface and Phase 2 Authentication Interface, esp. 15:49-64 and 16:53-67) The aforementioned cover the limitations of claims 4 and 8.

13. As per claim 6, the rejection of claim 4 under 35 U.S.C. 103(a) is incorporated herein. (*supra*) In addition, the subscriber identifier and the line identifier are transferred together to the provider (Xu, col. 16:53-63).

14. As per claim 9, it is a claim corresponding to claim 1 and it does not teach or define above the information claimed in claim 1. Therefore, claim 9 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejection of claim 1.

15. As per claims 12, 14 and 15, the rejection of claim 1 under 35 U.S.C. 103(a) is incorporated herein. (*supra*) In addition, a remote access server (network access server) associates the line identifier with the port, and stores and retrieves the line

identifier for authentication of a service request (Rigney, sec. 1, Introduction; Xu, col. 11:20-12:11, esp. 11:32-40; 15:45-17:24, Phase 1 Authentication Interface and Phase 2 Authentication Interface, esp. 15:49-64 and 16:53-67). In addition, a remote access server in the context of the invention taught by the combination of Rigney, Xu and Sitaraman necessarily includes a port, a management interface, a database interface and a network interface for the corresponding steps outlined above. The aforementioned cover the limitations of claims 12, 14 and 15.

16. As per claims 17-19, the rejections of claims 12, 14 and 15 under 35 U.S.C. 103(a) are incorporated herein. (supra) In addition, the subscriber unit is configured to present a user interface for selecting the network service (Xu, fig. 1, reference nos. 12 and 14; col. 4:27-30 and 55-61). The aforementioned cover the limitations of claims 17-19.

17. As per claims 21 and 22, they are claims corresponding to claim 1 and they do not teach or define above the information claimed in claim 1. Therefore, claims 21 and 22 are rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejection of claim 1.

18. As per claim 23, the rejection of claim 22 under 35 U.S.C. 103(a) is incorporated herein. (supra) In addition, the subscriber identifier comprises a login Id and a

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password received from the subscriber (Rigney, sec. 2, 3rd and 4th paragraph; Xu, col. 16:53-57).

19. As per claim 24, the rejection of claim 21 under 35 U.S.C. 103(a) is incorporated herein. (supra) In addition, the service request for DSL internet service is authenticated based on the retrieved line identifier and a login ID and password received from the subscriber (Rigney, sec. 2, 3rd and 4th paragraph; Xu, col. 15:49-64 and 16:53-67).

20. As per claim 25, it is a claim corresponding to claims 17 and 24, and it does not teach or define above the information claimed in claims 17 and 24. Therefore, claim 25 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejections of claims 17 and 24.

21. As per claim 26, it is a claim corresponding to claims 12 and 24, and it does not teach or define above the information claimed in claims 12 and 24. Therefore, claim 26 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejections of claims 12 and 24.

22. As per claim 27, it is a claim corresponding to claims 9 and 24, and it does not teach or define above the information claimed in claims 9 and 24. Therefore, claim 27 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejections of claims 9 and 24.

23. As per claim 28, it is a claim corresponding to claims 4 and 23, and it does not teach or define above the information claimed in claims 4 and 23. Therefore, claim 28 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejections of claims 4 and 23.

24. As per claim 29, it is a claim corresponding to claims 1 and 24, and it does not teach or define above the information claimed in claims 1 and 24. Therefore, claim 29 is rejected as being unpatentable over Rigney in view of Xu and Sitaraman for the same reasons set forth in the rejections of claims 1 and 24.

25. Claims 2, 3, 5, 7, 10, 11, 13, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigney in view of Xu and Sitaraman, and further in view of Ankney et al. USPN 5,113,499 (hereinafter Ankney).

26. As per claims 2 and 3, the rejection of claim 1 under 35 U.S.C. 103(a) is incorporated herein. (supra) Rigney does not expressly disclose authenticating the line identifier after first authenticating the subscriber identifier at the service provider. Ankney teaches an authentication procedure wherein the username and password of an access request is authenticated, and if so, then the address of the request is verified (figs. 2a-2e). By validating the address after validating the username and password, the address validation step is made only if the username and password are verified. It

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would be obvious to one of ordinary skill in the art at the time the invention was made to authenticate a subscriber identifier at the service provider and query the database in response to the authenticated subscriber identifier to retrieve the line identifier therefrom to restrict validation based on previous tests for an efficient yet effective means of layered authentication as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 2 and 3.

27. As per claim 5, it is a claim corresponding to claims 2-4 and it does not teach or define above the information claimed in claims 2-4. Therefore, claim 5 is rejected as being unpatentable over Rigney in view of Xu, Sitaraman and Ankney for the same reasons set forth in the rejections of claims 2-4.

28. As per claim 7, the rejection of claim 5 under 35 U.S.C. 103(a) is incorporated herein. (supra) In addition, the subscriber identifier and the line identifier are transferred separately to the provider (the two identifiers are distinct).

29. As per claims 10 and 11, they are claims corresponding to claims 2 and 3, and they do not teach or define above the information claimed in claims 2 and 3. Therefore, claims 10 and 11 are rejected as being unpatentable over Rigney in view of Xu, Sitaraman and Ankney for the same reasons set forth in the rejections of claims 2 and 3.

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30. As per claim 13, it is a claim corresponding to claims 2 and 12, and it does not teach or define above the information claimed in claims 2 and 12. Therefore, claim 13 is rejected as being unpatentable over Rigney in view of Xu, Sitaraman and Ankney for the same reasons set forth in the rejections of claims 2 and 12.

31. As per claim 16, it is a claim corresponding to claims 7 and 14, and it does not teach or define above the information claimed in claims 7 and 14. Therefore, claim 16 is rejected as being unpatentable over Rigney in view of Xu, Sitaraman and Ankney for the same reasons set forth in the rejections of claims 7 and 14.

32. As per claim 20, it is a claim corresponding to claims 7 and 18, and it does not teach or define above the information claimed in claims 7 and 18. Therefore, claim 20 is rejected as being unpatentable over Rigney in view of Xu, Sitaraman and Ankney for the same reasons set forth in the rejections of claims 7 and 18.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



April 17, 2006



KAMBIZ ZAND
PRIMARY EXAMINER

Jung W Kim
Examiner
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